



Problem of the Week

Problem E

Sliding Parabola

Suppose the parabola with equation $y = 4 - x^2$ has vertex at P and crosses the x -axis at points A and B , with B lying to the right of A on the x -axis.

This parabola is translated so that its vertex moves along the line $y = x + 4$ to the point Q . The new parabola crosses the x -axis at points B and C , with C lying to the right of B on the x -axis.

Determine the coordinates of C .

